

# Selecting One of Multiple Antennas to Receive Signals in a Wireless Packet Network

## Abstract

Selecting one of multiple antennas to receive signals in a wireless packet network. Correlation value and gain needed to boost the signal upto a desired power (or the signal strength of the received signal) are determined for each antenna by examining the non-payload portion (e.g., preamble) of the packet. The antenna with the best SNR is then chosen based on the rule given. In an embodiment, the correlation value is determined based on the Barker Sequence employed for each bit in the preamble. The selection may be performed for each data packet, thereby using the antenna receiving the signal most conducive to recovery of the data bits (including payload) in each data packet.